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Flow-injection systems for determining iron(III) and iodide with the use of catalytic reactions

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Abstract

Flow-injection systems with spectrophotometric detection were developed on the basic of catalytic reactions, namely, the Fe(III)-catalyzed oxidation of methanol with hydrogen peroxide and the iodide-catalyzed cerium-arsenite reaction. The developed systems were used to analyze industrial and natural waters. The detection limits attained were as low as 0.02 μg/mL of Fe(III) and 0.2 μg/mL of I- at relative standard deviations of 2-7% with the throughoutput of 35 and 25 h-1, respectively. © 1997 MAEe cyrillic signK Наука/Interperiodica Publishing.